

CLAIMS:

1. A method for providing heterogeneous layered video support, comprising the acts of:

- 5 constructing signaling information (220) defining how at least two layers (BS, ES) are to be combined at a decoder (200); and
 transmitting the signaling information along with the at least two layers (BS, ES) in a transport stream (250) to the decoder (200).

- 10 2. The method of Claim 1, wherein said transport stream (250) is an MPEG-2 transport stream.

3. The method of Claim 1, wherein said signaling information (220) is constructed as a plurality of parameter lists.

- 15 4. The method of Claim 3 where each of said plurality of parameter lists define a unique quality of service (QOS) of said transport stream (250).

- 20 5. The method of Claim 1, wherein said signaling information (220) is constructed as a parameter list.

6. The method of Claim 5, wherein said parameter list is comprised of a plurality of parameter values.

- 25 7. The method of Claim 6, wherein said parameter values define signaling information for each of said at least two layers (BS, ES).

8. The method of Claim 6, wherein one of said parameter values defines, for a corresponding layer, a DC compensation.

9. The method of Claim 8, wherein at least two of said parameter values define, for a corresponding layer, horizontal FIR coefficients for to a filtering operation required to combine the corresponding layer with a reference layer.

5 10. The method of Claim 8, wherein at least two of said parameter values define, for a corresponding layer, vertical FIR coefficients for a filtering operation required to combine the corresponding layer with a reference layer.

10 11. The method of Claim 6, wherein one of said parameter values defines, for a corresponding layer, a video stream encoding type.

12. The method of Claim 6, wherein a ratio of two of said parameter values defines, for a corresponding layer, a horizontal scaling factor.

15 13. The method of Claim 6, wherein a ratio of two of said parameter values defines, for a corresponding layer, a vertical scaling factor.

14. The method of Claim 6, wherein one of said parameters defines an identifier of the reference layer to be combined with a current layer.

20 15. The method of Claim 6, wherein one of said parameters determines how the current layer is combined with the reference layer.

16. The method of Claim 15, wherein the current layer is combined with the reference layer in one of a parallel and sequential manner.

17. The method of Claim 6, wherein one of said parameters defines whether a corresponding layer contains one of an interlaced or progressive video stream.

30 18. The method of Claim 1, wherein the signaling information is embedded by means of MPEG system descriptors.

19. A method for providing heterogeneous layered video support, comprising the acts of:

constructing signaling information (220) defining how at least two layers (BS, ES) are to be combined at a decoder (200); and

5 transmitting the signaling information (220) along with the at least two layers (BS, ES) in a program stream to the decoder (200).

20. The method of Claim 19, wherein said program stream is an MPEG-2 program stream.

21. A method for providing heterogeneous layered video support, comprising the acts of:

constructing signaling information (220) defining how at least two layers (BS, ES) are to be combined at a decoder (200); and

15 transmitting the at least two layers (BS, ES) over at least one of an MPEG-2 transport stream, an MPEG-2 program stream and an Internet Protocol (IP) stream to the decoder; and

transmitting the signaling information over at least one of an MPEG-2 transport stream, an MPEG-2 program stream and an Internet Protocol (IP) stream to the
20 decoder (200).

22. A method for providing heterogeneous layered video support, comprising the acts of:

constructing signaling information (220) defining how at least two layers (BS, ES) are to be combined at a decoder (200);

25 transmitting the at least two layers (BS, ES) over Internet Protocol using real-time transport protocol (RTP) in a transmission session for each layer; and

transmitting the signaling information (220) within the context of said transmission session.

23. The method of Claim 22, wherein said signaling information (220) is transmitted in-band within said session.

24. The method of Claim 22, wherein said signaling information (220) is
5 transmitted out-of-band within said session.

25. The method of Claim 22, wherein said signaling information (220) is transmitted using session description protocol (SDP).